



Shrewsbury Public Schools

Office of Special Education
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Department of Nursing Report to the School Committee Data from 2014-15 School Year Presented by Noelle Freeman, Director of Nursing Services October 7, 2015

Introduction

The Shrewsbury Public Schools Department of Nursing plays a critical role in the life of the school and as part of the overall team to support student learning. The nurses are integral in supporting the district's strategic priorities, one of which is the promotion of health and wellness. The school nurses support this goal daily as they work to keep students safe, healthy and ready to learn.

The Massachusetts School Nurse Organization (MSNO), describes the role of the school nurse in this way, "The rapid changes occurring in our society and in our health care system present many challenges for the school nurse. Many students come to school shouldering a background of profound health risks, which, in turn, affect their academic progress and success. Modern technology and pharmacology have made it possible for students with special health care needs to participate within the mainstream educational setting. Through the professional expertise of the school nurse, student health needs are assessed, identified and monitored. The school nurse functions with other professionals in the school community to facilitate health and wellness so that each student will have the opportunity for academic success."

The school nurses in Shrewsbury come from a variety of backgrounds and bring with them a wealth of experience and nursing knowledge. The academic achievement of our students is bolstered by the skillful care that they receive when visiting the health office. After being treated, most students (93%) are able to return to class to continue learning. Functioning as an integral part of the interdisciplinary team, school nurses communicate with teachers, administrators, parents, and outside providers to ensure that our students are receiving the care and services that they need to optimize their learning potential.

Mission Statement

The mission statement for the Shrewsbury Public Schools Department of Nursing is:

To promote and advocate for the physical and emotional health and well being of the students, families, and staff in a proactive manner, realizing different individuals will be at varying levels on the health spectrum in their pursuit of educational excellence.

School Nursing Staff

During the 2014-15 school year, Shrewsbury Public Schools Nursing Services employed 10 full-time nurses, and three part-time nurses working two hours per day, providing health care services to **6,157** students and **861** staff in the Shrewsbury Public Schools. Each nurse brings a myriad of health care experience with her.

For the 2015-16 school year, a Director of Nursing position and two .4 FTE positions (one each for Oak Middle School and Sherwood Middle School) were added to the department, bringing our staffing to: one Director (51% direct student services and 49% Director responsibilities), 10 full-time nurses, two 0.4 FTE nurses, and one part-time two hour nurse (Floral Street School).

We have 10 substitute nurses who fill in for the regular staff nurses or accompany field trips when necessary.

The Massachusetts Department of Public Health recommends a school nurse to student ratio of 1.0 fulltime equivalent (FTE) certified nurse in each building with 250 to 500 students. In buildings with more than 500 students, there should be .1 FTE for each additional 50 students.

Data Management

The school nurses are responsible for maintaining the integrity and confidentiality of the student Health Record. Each student has a computerized Health Record as well as a paper file. The nurse ensures all immunizations are up to date, that state physical exam requirements are met, and that mandated screenings are accomplished, recorded and reported.

We implemented a new Electronic Health Record, SNAP Health Center, in August of 2015. This system is more efficient than the FilemakerPro database that was utilized in the past and will allow for improved documentation of student encounters, medication administration, and information exchanges with parents, staff and community providers.

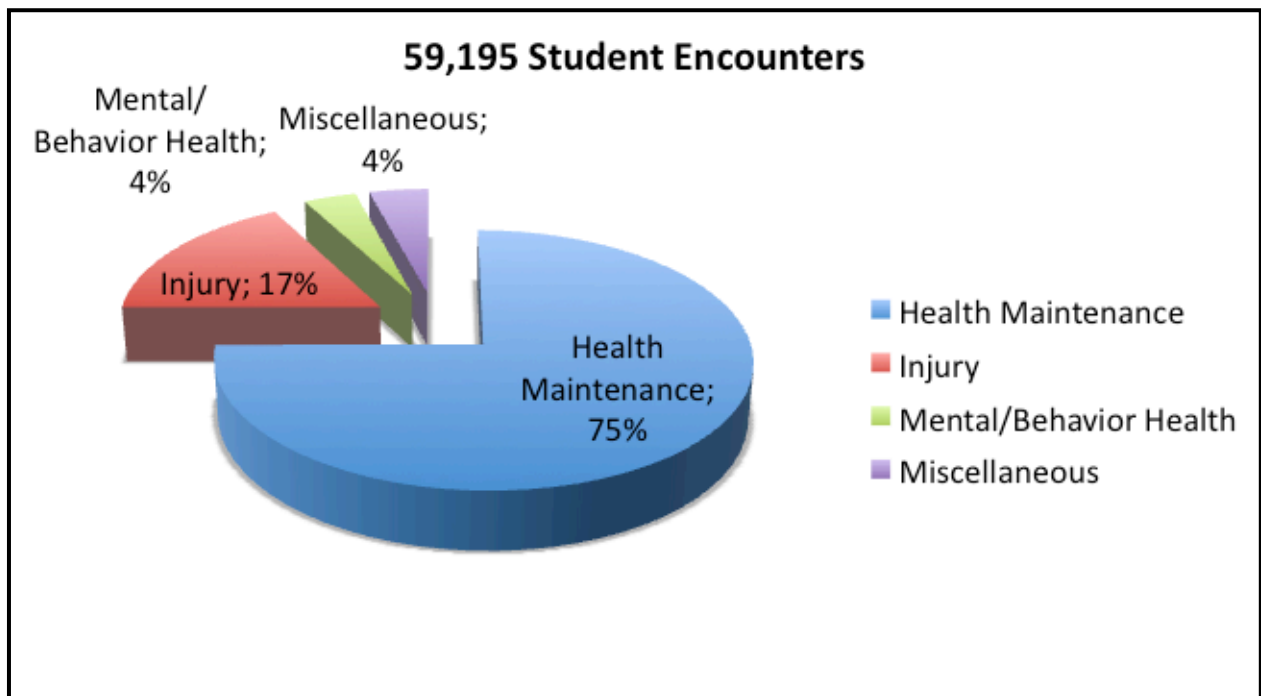
For the purposes of this report, statistics using our FilemakerPro system were used. A daily nursing log was maintained for each student and staff encounter throughout the year. The log was categorized by type of visit as well as the nursing intervention performed. These visits are divided into four categories:

- Health Maintenance
- Injury/First Aid
- Mental/Behavioral Health
- Miscellaneous

An “encounter” is defined as any contact with a student during which the school nurse provided counseling, treatment, or aid of any kind. Mandatory screenings (vision, hearing and postural) are not counted as encounters. Screenings are tracked and reported separately.

For the 2014/15 school year the Shrewsbury Public School nurses reported a total of **59,195** student health encounters and **1,171** staff health encounters. The chart below outlines the specifics of the total number of encounters for this period.

Encounter	Total # of Students	Total # of Staff
Health Maintenance	44,374	945
Injury/First Aid	10,174	166
Mental Health/Behavioral Health	2,186	46
Miscellaneous	2,461	14
Total	59,195	1,171



Primary Responsibilities

The school nurses manage a comprehensive, coordinated health service program that includes:

- Providing skilled nursing care to students and staff who present with a broad range of physical and mental health issues
- Implementing mandated health screening programs (vision, hearing, postural, and BMI)
- Managing the school's medication program
- Managing immunization compliance for incoming and existing students
- Coordinating health care needs for students attending field study trips, field day, etc
- Implementing disease management education for children and families with chronic illnesses such as diabetics and asthma among others
- Coordinating and/or participating in health related community outreach activities
- Providing a safe haven for students needing additional emotional support to remain in school

MA Department of Public Health Mandated Screenings

Massachusetts Department of Public Health mandates screenings for students at certain grade levels as seen below. The screenings result in many conditions being identified, referred and treated by primary care physicians and specialists.

Screening	Total # of Students
Hearing and vision screenings required for all students grades Pre-K-5, 7 and 10	3,907
Referral for further vision evaluations	365
Referral for further hearing evaluations	38
Postural screenings required for grades 5 - 9	2,432
BMI (Body Mass Index) measured in grades 1, 4, (6)*, 7 and 10 <i>*(6th grade is also measured for BMI, however it is not state mandated)</i>	2,365
Total	9,107

Hearing and Vision Screenings

Hearing and vision screenings are completed for all students in grades K – 5, 7 and 10. Vision screenings are also completed for Pre K students. It may take several attempts to have some of our younger students participate in a valid screening procedure. The nurses are responsible for sending notifications to the parents/guardians recommending further follow up for any student who does not pass a screening.

Postural Screenings

The Physical Education staff weighs, measures and performs initial postural screenings. The nurses are responsible for all re-screens of students who had questionable results, failed or who were absent on the day of screening. The nurses record data in the health record and notify parents of the need for medical follow up.

During the 2014-15 school year, **490** students were re-screened by the nurses and **110** referral letters were sent to parents/guardians to recommend follow up for an abnormal finding.

Medication Management and Administration

There were **866** scheduled prescriptions and **7,075** as needed prescriptions on file for students this school year.

Additionally, we have Standing Orders that are reviewed and signed annually by our school physician, Dr. Tim Gibson. Each family is asked, at the beginning of each school year, to give written consent for the administration of these medicines. These include medications such as Ibuprofen, Acetaminophen, Tums, etc. as well as life-saving medications such as an EpiPen or Albuterol nebulizer treatment.

The number of medications given during the 2014/15 school year were as follows:

Medication Administration	Total # given to Students	Total # of Staff
Daily Prescription Med	10,312	-
Prescription and over the counter doses given as needed	12,485	1,929

Tracking Immunization Compliance

School nurses are responsible for checking the immunization status of all students who enter SPS. The district welcomed 440 students who moved into Shrewsbury during the 2014-15 school year, plus approximately 480 Preschool and Kindergarten initial enrollments. For each of these students, immunization records are checked against Massachusetts requirements and parents/guardians are informed if any immunizations are missing. Students are not permitted to begin school until they are fully immunized (or on a catch-up schedule). Referrals are made to area clinics, including St. Anne's Free Medical Clinic, as needed.

Field Study Preparation

SPS nurses prepared medical alert information for approximately 195 field trips last year. Preparation includes accessing a list of students who will attend a trip, determining the medical needs of those students (allergies requiring EpiPens, asthma, daily medications, anxiety issues, etc.) and assessing the need to send a substitute nurse to care for those needs. If a substitute nurse is required, the school nurse must find an available sub from our pool and inform her of the needs for the day. If a substitute is not needed, the school nurse must review the needs with the teacher who will be responsible for the students during the trip. In either scenario, the nurse prepares a bag of first aid supplies to be sent along with the adult in charge; medications are included as needed if a substitute nurse is in attendance

Procedures/Treatments/Nursing Interventions

The nurses perform various procedures and treatments throughout each day. Some of these include:

- Respiratory Procedures (auscultation of lungs, peak flow monitoring, nebulizer treatment, oxygen saturation check)
- Diabetic Procedures (blood glucose testing, insulin pump care, carbohydrate/insulin calculations, monitoring and treatment of ketones)
- Cardiovascular Procedures (blood pressure measurement, central line care, site care, flushing)
- GI/GU Procedures (Naso-gastric, gastrostomy or other feeding tube care or usage)
- Orthopedic Procedures (Wheelchair assistance, crutch-walking instruction)
- Wound Care
- Head Checks for Pediculosis
- Creation and service of school evacuation plan for students with physical disabilities

Disposition after Illness/Injury Assessment

By addressing the immediate health needs of students and providing onsite care, school nurses support learning through improved attendance levels. After assessment and treatment by a school nurse, the majority (approximately 93%) of students visiting the nurses' office with an illness or injury complaint returned to the classroom to continue their studies.

Students who are treated by the school nurse can return to the classroom with minimal interruption to their educational activities, working parents do not have to take time off, and the high cost of treatment in a doctor's office or emergency department may be avoided.

Emergency Calls to 911

Student 911 Medical Emergencies	8
Student 911 Behavior Health Emergencies	7
Student Calls to Mobile Crisis	3
Student Referrals for Emergency Health Care	23
Staff 911 calls	1

Case Management

The Shrewsbury Public School nurses spend a significant portion of their day performing Public Health case management duties that include communication with families, school staff, and community health care providers regarding student health issues.

Type of Communications		Total # of Students
Communications with Parents or Guardians	< 15 mins	10,081

	> 15 mins	1,845
Communications with School Staff about health issues	< 15 mins > 15 mins	4,451 928
Communications with Community Agencies	< 15 mins > 15 mins	162 13
Number of Group Meetings with staff/Parents	< 15 mins > 15 mins	184 159
Total		17,823

Students with Special Health Care Needs

The table below shows the number of physical and developmental conditions throughout the Shrewsbury School District. Some students may have more than one condition.

Physical/Developmental Conditions	Number of Students With Condition
Allergies	
Bee Stings	21
Food Allergies	484
Latex Allergies	27
Total number of students with EpiPens in Health offices	296
Asthma History	639
Inhaler in Office	181
Other Respiratory Disorders	27
Autoimmune Disorders (Arthritis, Lupus, etc)	14
Blood Dyscrasias	
Hemophilia	1
ITP	1
Sickle Cell	1
Von Willibrand	0
Other blood dyscrasias	10
Cancer	3
Cardiac Conditions	25
Celiac Disease	23
Cerebral Palsy	7
Cystic Fibrosis	2
Diabetes Type 1	23
Diabetes Type 2	4
Inflammatory Bowel Disease	8
Migraine Headaches	47
Neuromuscular Degenerative Disorder	7
Pulmonary Hypertension	1

Seizure Disorder	36
Spina Bifida	2
Other Physical/Development Conditions	15
ADHD/ADD	421
Anxiety	136
Autism	144
Depression	79
Eating Disorders	4
Encopresis	3
PTSD/Trauma History	42
Other Behavior/Emotional Conditions	79
Total Number of Students with 504 Accomodation Plans	181

Total Number of Students with Individual Health Care Plan	22
Number of Students with Do Not Resuscitate	1
Number of Students with Tracheostomies	1
TOTAL NUMBER OF INDIVIDUAL STUDENTS WITH SPECIAL HEALTH CARE NEEDS	1,894

Secondary Nursing Responsibilities

All of the Shrewsbury nurses are involved with the following activities in their respective buildings:

- The collection of monthly report data required by Essential School Health Service Program Grant
- Attending Individualized Educational Program (IEP) and 504 meetings
- Child Abuse Prevention (CAP) Team
- Building Crisis Team
- Medical Emergency Team (MERT)
- Student Support or Early Intervening Team
- Building Leadership
- Responsible to create and update evacuation plans for our students with physical impairments
- Responsible for maintenance of Automated Electronic Defibrillators (AED's)

- Coordinating flu shot clinic for staff

The following are examples of additional teams/activities that include school nurse involvement:

- School Wellness Advisory Committee
- Health and Safety Committee
- Shrewsbury Board of Health Emergency Preparedness Team - Flu Pandemic, Directing Emergency Medication Dispensing Sites, Anthrax and NIMS Training, and provide Emergency Shelter Staffing
- Responsible for completion of MA Department of Public Health mandated surveys: Immunization, Diabetic, Asthma, 911 forms
- Provide professional leadership in the Shrewsbury community, for example: Stroke awareness, blood pressure checks, Relay for Life, 5K road races, Health and Wellness Crew
- EpiPen training for bus drivers for Assabet Valley Collaborative (AVC) Evolution program
- Partnering with AVC Evolution Program at SHS to ensure the Health and Safety of their students

Tertiary Nursing Responsibilities

- Mentoring SHS students who are considering nursing as a career/ACE (Advanced Career Exploration) Program
- Serving as preceptor for RN-BSN students in their Community Health practicum
- Co-ordinate food drives, winter coat and hat/mitten, holiday giving distribution in conjunction with school based groups and community organizations (St. Anne's Human Services, Worcester County Food Bank, etc.)
- Classroom presentations on health related subjects
- Developing Classroom Emergency Kits for first aid and shelter in place
- Assist TV production students with timely health related interviews for viewing on local cable network

Essential School Health Service Program

Shrewsbury Public Schools participates as a mentored school district and receives consultation on school health services from the Northbridge School District (funded ESHS program) based on the requirements of the Essential School Health Infrastructure Grant. The grant provides opportunities for consultation in the areas of policy development, programming and interdisciplinary collaboration and develops linkages between School Health Service Programs and Community Health Care providers.

Some of the responsibilities inherent with the grant are to provide data to MDPH. This data is utilized for published studies, statewide reports and strategic planning. The types of information included are:

- Health Service activity

- Incident reports
- Emergency referrals
- Number of diagnosed or suspected head injuries
- Medication management for students
- Medication management for staff
- Nursing assessments/interventions/procedures/treatments
- Nursing care management
- Linkages
- Wellness management
- Support groups
- Program development
- Professional development

Behavioral Health Interventions Tracking

- Anti-Bullying intervention by district protocol
- Coping enhancement strategies
- Reassurance check-in
- Self-calming activities; Stress/anxiety reduction activities
- Emotional support
- Monitor for self-harm
- Social skills support
- Relationship guidance

In return, we receive a stipend of \$3,000 per year. These monies are used for such things as medical equipment and professional development opportunities for nursing staff.

Emergency Equipment

EpiPens

We continued with the program that gives free EpiPens to schools. The “EpiPen for Schools” program was made available by Mylan Speciality. We were able to take advantage of this program resulting in a savings of \$2800 to our district.

AEDs

An automatic external defibrillator is a portable device used to restore normal heart rhythm to a patient in cardiac arrest. Shrewsbury Public Schools has a total of 16 AEDs with at least one AED in every preschool and elementary school (Floral and Coolidge have two), two at Sherwood Middle School, two at Oak Middle School (one belonging to Parks and Recreation) and four at Shrewsbury High School, one designated for the athletic trainer.

The SPS nurses are responsible for checking the AED status on a regular basis and the Director of Nursing works with the Town’s Emergency Management Coordinator to facilitate the updates and maintenance of the equipment.

Professional Development

Topics covered during the 2014-15 professional development days were as follows:

- Mental Health First Aid, Part I and Part II, presented by Melissa Maguire
- Seizure Training for School Personnel, presented by the Epilepsy Foundation of New England
- District Determined Measures, presented by Melissa Maguire
- Neuromuscular Diagnostic Case Studies, presented by Dr. Tim Gibson
- Collaborative & Proactive Solutions for Mental Health, presented by Kim Doheny, RN
- Review of SNAP Health Center Program, a comprehensive medical documentation and tracking software suite that manages every aspect of student health related data

Health and Wellness Initiatives

“Taking Root at Parker Road Preschool” *Project leader Kristin Stewich, BSN, RN, NCSN*

The school garden at Parker Road continues to be a huge success! This project is a collaborative effort with Home Depot of Shrewsbury. A combination of funding in the form of a second SEF grant and funding from Kohl’s Associates in Action program resulted in new permanent raised beds, and the upcoming addition of a fence. The garden expansion was a true community event this year as students from SHS and associates from Kohl’s took part in the effort. All kinds of wonderful veggies and flowers have been planted this year.

“A Visit from the Dentist,” *Coordinated by Sandy Sorenson, BSN, RN and Lisa Smith, BSN, RN, NCSN*

Dr. Alisa Feldman, a dentist in Shrewsbury for over 30 years, returned to Floral and Paton to present an interactive program to practice correct dental hygiene to one kindergarten class and 9 First Grade classes.

“Healthy Habits in the Classroom” *Classroom presentations by Rebecca Carle, BSN, RN; Lisa Smith, BSN, RN, NCSN; Sandy Sorenson, BSN, RN; Jill Wensky, BSN, RN, NCSN; Katie Zimmermann, BSN, RN, NCSN*

The school nurses in all of the elementary schools ventured into classrooms to teach kindergarten and first grade students about healthy habits for school, including hand washing and proper cough/sneeze etiquette. Nurses read aloud a grade level appropriate book, demonstrated the skills and answered students’ questions.

“Strategies for Building Emotional Resilience in Middle School Students” *Facilitated by Kristin Franger, BSN, RN, NCSN and Noelle Freeman, BSN, RN, NCSN in collaboration with Kristin Minio, LMHC, and Jenni Lencioni, LMHC OMS School Adjustment Counselors*

By incorporating the 1:1 devices that all middle school students now have, modalities such as biofeedback (focused breathing), symptom and trigger checklists that increase self-awareness, and sensory integration are being used as strategies for reducing anxiety and stress in our students. Students who utilized the biofeedback app were surveyed at the end of the school year and reported a decrease in their symptoms after using the strategies provided.

“Fostering Independence in Senior Students with Diabetes” *Facilitated by Brenda Filiere, BSN, RN and Pam Johnson, BSN, RN, NCSN*

Students with diabetes must learn to be independent in the management of their chronic illness. The SHS nursing team is working with students to assess their level of self-care skills and foster complete independence before graduating and moving into the “real world”. Complete independence is defined as: knowledge of the disease, the ability to recognize symptoms of hypo- and hyperglycemia, the ability to manage daily blood glucose levels including carbohydrate calculation and insulin delivery, and the ability to self advocate at SHS, and in future school settings regarding academic needs related to diabetes.

Goals for the 2015/16 School Year

EpiPen Training for Staff – It is our goal to more formally train several staff and administrators in the use of EpiPens for students with known life-threatening allergies. An MDPH approved training will be used, including a post test and skills demonstration.

CPR/AED Training for Staff – It is our goal to train several staff members in each building in CPR and AED skills in order to be more prepared to respond to emergency situations. Three of the nurses have been trained as American Heart Association BLS Instructors and will offer trainings throughout the year.

SNAP Proficiency – As the year progresses we will all become more familiar with and efficient in the use of our new EHR, SNAP Health Center. Proficiency in the use of this system will allow us to capture more accurate data, identify trends, and shape our interventions and focus areas.

Possible Implementation of Narcan (naloxone) in all SPS schools – As the opioid epidemic in Massachusetts continues to grow, the Department of Public Health is asking that school nurses add Narcan to our stock of emergency medications. Five of the nurses in the district have been trained in the use of Narcan, and we anticipate additional training as this school year progresses. We are currently in the process of gathering information and planning for implementation in Shrewsbury.